

62 49. (Thrice Amended) The baculovirus vector of Claim 48, wherein said glycosylphosphatidylinositol anchor coding sequence is from a CD59 gene or a CD14 gene.

63 51. (Twice Amended) The baculovirus vector of Claim 46, wherein said synthetic polynucleotide and said polynucleotide encoding a signal peptide comprise SEQ ID NO:7.

55. (Thrice Amended) A baculovirus vector selected from the group consisting of PfMSP1p19A deposited at the CNCM under No. I-1661, PfMSP1p19S deposited at the CNCM under No. I-1662, and PcMSP1p19S deposited at the CNCM under No. I-1663.

64 56. (Thrice Amended) A synthetic polynucleotide comprising a synthetic sequence encoding a 19 kilodalton C-terminal fragment of a *Plasmodium falciparum* merozoite surface protein 1 (MSP-1), wherein said synthetic sequence has a total GC content of 40% to 60%

65. (Twice Amended) A baculovirus vector comprising a promoter, a synthetic polynucleotide encoding a 19 kilodalton C-terminal fragment of a *Plasmodium falciparum* merozoite surface protein 1 (MSP-1) having a GC content of between 40% to 60%, and a polynucleotide encoding a signal sequence of a *Plasmodium vivax* MSP-1 protein.

66. (Twice Amended) The baculovirus vector of Claim 65, wherein said synthetic polynucleotide further comprises a glycosylphosphatidylinositol anchor coding sequence.

67. (Twice Amended) A baculovirus vector, comprising:

(a) a promoter;

65 (b) a synthetic polynucleotide comprising a synthetic sequence encoding a 19 kilodalton C-terminal fragment of a *Plasmodium falciparum* merozoite surface protein 1 (MSP-1) having a GC content of between 40% to 60%, and a glycosylphosphatidylinositol anchor coding sequence from a CD59 gene or a CD14 gene; and

(c) a polynucleotide encoding a signal sequence of a *Plasmodium vivax* MSP-1 protein.--

Please add the following claims:

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--69. (New) A baculovirus vector, comprising:

(a) a promoter;

64 (b) a synthetic polynucleotide of a sequence SEQ ID NO:9 encoding a 19 kilodalton C-terminal fragment of a *Plasmodium falciparum* merozoite surface protein 1 (MSP-1) and having a GC content of 40% to 60%; and

(c) a polynucleotide encoding a signal peptide of a *Plasmodium* MSP-1 protein.

70. (New) A baculovirus vector, comprising:

(a) a promoter;

(b) a synthetic polynucleotide consisting essentially of a sequence SEQ ID NO:1 encoding a 19 kilodalton C-terminal fragment of a *Plasmodium falciparum* merozoite surface protein 1 (MSP-1) and having a GC content of 40% to 60%, and a glycosylphosphatidylinositol anchor coding sequence; and

(c) a polynucleotide encoding a signal peptide of a *Plasmodium* MSP-1 protein.

71. (New) The baculovirus vector of Claim 70, wherein said glycosylphosphatidylinositol anchor coding sequence is from a CD59 gene or a CD14 gene.

72. (New) The baculovirus vector of Claim 70, wherein said synthetic polynucleotide is SEQ ID NO:4.

73. (New) The baculovirus vector of Claim 69, wherein said synthetic polynucleotide and said polynucleotide encoding a signal peptide comprise SEQ ID NO:7.

74. (New) A baculovirus vector, comprising a promoter and a synthetic polynucleotide of a sequence SEQ ID NO:9.

75. (New) A baculovirus vector, comprising:

(a) a promoter;

(b) a synthetic polynucleotide consisting essentially of a sequence SEQ ID NO:1 encoding a 19 kilodalton C-terminal fragment of a *Plasmodium falciparum* merozoite surface protein 1 (MSP-1) and having a GC content of 40% to 60%, and a sequence encoding a *Plasmodium vivax* Duffy binding protein or a *Plasmodium falciparum* EBA-175 protein; and

(c) a polynucleotide encoding a signal peptide of a *Plasmodium* MSP-1 protein.

76. (New) A synthetic polynucleotide comprising a synthetic sequence encoding a 19 kilodalton C-terminal fragment of a *Plasmodium falciparum* merozoite surface protein 1 (MSP-1) having a total GC content of 40% to 60%, wherein said synthetic sequence is contained in a baculovirus vector selected from the group consisting of PfMSP1p19A deposited at the CNCM under No. I-1661 and PfMSP1p19S deposited at the CNCM under No. I-1662.

77. (New) The synthetic polynucleotide of Claim 76, wherein said synthetic polynucleotide, comprising said synthetic sequence contained in said baculovirus vector PfMSP1p19S deposited at the CNCM under No. I-1662, is SEQ ID NO:1 or SEQ ID NO:7.

78. (New) The synthetic polynucleotide of Claim 76, wherein said synthetic polynucleotide further comprises a glycosylphosphatidylinositol anchor coding sequence.

79. (New) The synthetic polynucleotide of Claim 78, wherein said glycosylphosphatidylinositol anchor coding sequence is from a CD59 gene or a CD14 gene.

80. (New) The synthetic polynucleotide of Claim 78, wherein said synthetic polynucleotide comprises said synthetic sequence contained in said baculovirus vector PfMSP1p19A deposited at the CNCM under No. I-1661, and is SEQ ID NO:4.

81. (New) The synthetic polynucleotide of Claim 76, wherein said synthetic polynucleotide further comprises a polynucleotide encoding a signal peptide of a *Plasmodium* MSP-1 protein.

82. (New) The synthetic polynucleotide of Claim 76, wherein said synthetic polynucleotide comprises said synthetic sequence contained in said baculovirus vector PfMSP1p19S deposited at the CNCM under No. I-1662, and is SEQ ID NO:9.

83. (New) The synthetic polynucleotide of Claim 76, wherein said synthetic polynucleotide further comprises a polynucleotide encoding a *Plasmodium vivax* Duffy binding protein or a *Plasmodium falciparum* EBA-175 protein.

84. (New) A baculovirus vector comprising:

(a) a promoter;

(b) a synthetic polynucleotide comprising a synthetic sequence encoding a 19 kilodalton C-terminal fragment of a *Plasmodium falciparum* merozoite surface protein 1 (MSP-1) and having a GC content of 40% to 60%; and

(c) a polynucleotide encoding a signal sequence of a *Plasmodium vivax* MSP-1 protein,

wherein said synthetic sequence is contained in a baculovirus vector selected from the group consisting of PfMSP1p19A deposited at the CNCM under No. I-1661 and PfMSP1p19S deposited at the CNCM under No. I-1662.

85. (New) The baculovirus vector of Claim 84, wherein said synthetic polynucleotide further comprises a glycosylphosphatidylinositol anchor coding sequence.

86. (New) The baculovirus vector of Claim 85, wherein said glycosylphosphatidylinositol anchor coding sequence is from a CD59 gene or a CD14 gene.--